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23377 7590 06/13/2007 WOODCOCK WASHBURN LLP CIRA CENTRE, 12TH FLOOR 2929 ARCH STREET PHILADELPHIA, PA 19104-2891			EXAMINER YIMAM, HARUN M	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

09/866,765

Applicant(s)

HODGE ET AL.

Examiner

Harun M. Yimam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-16 and 18-43 have been fully considered but they are not persuasive.
2. In response to applicant's argument (page 17, 1<sup>st</sup> paragraph and page 21, 2<sup>nd</sup> paragraph) that nothing is cached until the user first selects a still image, Applicants' should first note that pre-cached data is still cached data. The claim limitations call for processing cached data to generate a video display and Broadwin teaches the pre-loading (processing) / pre-caching still images (data) to generate a video display (column 3, lines 9-17 and column 11, lines 42-45) and therefore, the claim limitations are met.
3. In response to applicant's argument (page 18, 1<sup>st</sup> paragraph) that Broadwin fails to disclose the last limitation of claim 19, the Examiner would like to point out that Broadwin teaches receiving an operator input calling for expansion of display of the primary image so as to cover at least a part of the secondary image at a viewer location (column 11, lines 7-9 and 16-23); responding to the operator input by generating second instructions in the interactive television client application program to display the primary signal in a full-frame mode at the viewer location (see figures 15

and 16—column 9, lines 42-60); outputting the first and second instructions to the viewer location (column 5, lines 20-26).

4. In response to applicant's argument (page 20, 2<sup>nd</sup> paragraph) that Broadwin fails to disclose storing data specifying the first purchase request in a purchase buffer, the Examiner would like to point out that Broadwin discloses that the *transaction server receives a purchase request and processes the order for fulfillment* (column 7, lines 61-65). Applicants' should note that prior to fulfilling the purchase request, it is clear that the transaction server stores the purchase request in a buffer before/while carrying out the process.

5. In response to applicant's argument (page 22, 3<sup>rd</sup> paragraph) that neither Broadwin nor Haddad disclose processing the interactive signal at the viewer location to initiate an interactive ad activity using the customer I.D. number, Applicants' should note that Broadwin discloses processing the interactive signal at the viewer location to generate a first sensitive area on the image (column 17, lines 44-46). Broadwin further discloses an entry form (figure 19) to be filled out by a customer for saving customer identification information in the transaction server (160) for possible user transactions. Haddad discloses processing the interactive signal at the viewer location to initiate a purchase transaction using the customer I.D. number (paragraph 0060, lines 4-7, paragraph 0071, lines 1-2, and paragraph 0080, lines 13-16).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-15, 18-20, 25-33, and 39-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Broadwin (US 5,903,816).

Considering claim 1, Broadwin discloses a method for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: receiving a first video signal constituting a primary image (audiovisual content comprising still video images—column 4, lines 55-63); receiving a second video signal constituting a secondary image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12); combining the first and second video signals to form a broadcast video signal representing a composite of the primary and secondary images (column 5, lines 11-13); receiving a specification of a predetermined location ("instant web" column in fig. 17) in at least one of the primary and secondary image as a specified portion of the composite image (column 18, lines 5-13); generating instructions to form an interactive television client application program (column 5, lines 6-8) which renders the specified portion of the

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composite image as a location for a sensitive area (column 18, lines 5-7 and column 7, lines 34-41 and 48-53. "Sensitive area" reads on each item description for each channel, which is selectable by the user, shown in figure 17, i.e. *Plymouth*, which his reserved for channel 204); generating instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for a virtual channel (selection displays or supplemental screens in conjunction with the respective MPEG stills—column 6, lines 22-33) to be displayed in said sensitive area (selection button or hyperlink—column 7, lines 34-41 and 48-53), said virtual channel comprising a plurality of secondary screens (one or more selection screens—column 6, lines 22-33), wherein the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36); and outputting the instructions to form said interactive television client application (column 5, lines 6-8), said virtual channel, and the broadcast video signal for transmission to a customer location (column 5, lines 20-26).

As for claim 2, Broadwin discloses combining the instructions with the broadcast video signal (column 5, lines 11-13) and outputting the combined signal for transmission to a customer location (column 5, lines 20-26).

With regards to claim 3, Broadwin discloses that the primary image comprises a moving video image (audiovisual content comprising movies—column 4, lines 55-63).

Regarding claim 4, Broadwin discloses that the secondary image comprises a static video image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12).

Considering claim 5, Broadwin discloses that the interactive television client application program (column 5, lines 6-8) includes instructions for causing a broadcast receiver to render the specified image portion as a first sensitive area to implement a desired interactive television operation (column 7, lines 34-41 and 48-53).

As for claim 6, Broadwin discloses that the desired interactive television operation comprises displaying a supplemental screen (displaying MPEG stills—column 18, lines 5-25).

With regards to claim 7, Broadwin discloses that the desired interactive television operation comprises displaying a plurality of supplemental screens (MPEG stills comprising thumbprint images—column 18, lines 5-21) containing catalog information (send brochure option—column 18, lines 22-37).

Regarding claim 8, Broadwin discloses that the desired interactive television operation comprises receiving a viewer input to initiate a purchase transaction corresponding to at least a part of the catalog information (the hyperlink page of the

MPEG stills comprise a send brochure option—column 18, lines 22-37 and a user can select the MPEG stills to order information or products—column 6, lines 22-38).

Considering claim 9, Broadwin discloses that the generated instructions cause a broadcast receiver to render the specified image portion as an initial display while the interactive television client application program is being loaded into a memory of a broadcast receiver (column 7, lines 3-24), prior to rendering the specified image portion as a first sensitive area.

As for claim 10, Broadwin discloses that the secondary image comprises an interactive advertising area (column 18, lines 9-21) and the generated instructions cause a broadcast receiver to render the interactive advertising area as an initial display (column 18, lines 22-32) while the interactive television client application program is being loaded into a memory of a broadcast receiver (column 18, lines 27-32), and the interactive television client application program subsequently renders the interactive advertising area as a second sensitive area (thumbprints of stills—column 18, lines 22-32).

With regards to claim 11, Broadwin discloses a method for broadcasting an interactive television channel, comprising: receiving a video signal (AVI signal—column 5, lines 11-13) component over a first communications channel (first broadcast satellite transmission in figure 2), the video signal component comprising a first video signal



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(audiovisual content) constituting a primary video image (audiovisual content comprising still video images—column 4, lines 55-63) and a second video signal constituting a secondary video image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12) combined to generate a composite image of the primary and secondary images (column 5, lines 11-13), and receiving an instruction signal component (column 5, lines 3-8) comprising instructions to form an interactive television client application program (interactive application content) which defines a specified portion of the composite image as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17); receiving instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for a virtual channel (selection displays or supplemental screens in conjunction with the respective MPEG stills—column 6, lines 22-33) to be displayed in said sensitive area (selection button or hyperlink—column 7, lines 34-41 and 48-53), said virtual channel comprising a plurality of secondary screens (one or more selection screens—column 6, lines 22-33), wherein the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36); and transmitting a broadcast signal over a second communications channel (second broadcast satellite transmission in figure 2) to a plurality of viewer locations (end-users—column 5, lines 20-26), the broadcast signal (combined AVI signal) including the video said signal component, said instruction for a virtual channel and the instruction signal component (column 6, lines 10-12).

Regarding claim 12, Broadwin discloses a method for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: receiving a first video signal constituting a primary image (audiovisual content comprising still video images—column 4, lines 55-63); receiving a second video signal constituting a secondary image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12); combining the first and second video signals to form a broadcast video signal representing a composite of the primary and secondary images (column 5, lines 11-13); receiving a specification of a predetermined location (“instant web” column in fig. 17) in at least one of the primary and secondary image as a specified portion of the composite image (column 18, lines 5-13); generating instructions to form an interactive television client application program (column 5, lines 6-8), which renders a specified portion of the composite image as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17) and which generates a first screen containing the primary and secondary images (see figure 17 and column 18, lines 5-13) and, in response to viewer input, generates a virtual channel comprising plurality of secondary screens (selection displays or supplemental screens in conjunction with the respective MPEG stills—column 6, lines 22-33) including the secondary video images (an image including thumbprints of MPEG stills), wherein the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36); and outputting the instructions and the broadcast video signal for transmission to a customer location (column 18, lines 22-32).

Considering claim 13, Broadwin discloses combining the instructions with the broadcast video signal (column 5, lines 11-13) and outputting the combined signal for transmission to a customer location (column 5, lines 20-26).

As for claim 14, Broadwin discloses a method for implementing an interactive television application at a viewer location, comprising: receiving a composite signal (combined AVI signal—column 5, lines 11-13) at the viewer location over a communications channel, the composite signal including video signals representing an image comprising a primary portion (audiovisual content comprising still video images—column 4, lines 55-63) and a secondary portion (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), including instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for generating a sensitive area (selection buttons or hyperlinks—column 7, lines 34-41 and 48-53), and signals (AVI signals) representing data for a virtual channel display (selection displays or supplemental screens in conjunction with the respective MPEG stills—column 6, lines 22-33); processing the signals representing data and caching the data at the customer location (column 11, lines 41-46); processing the video signal at the viewer location to generate the image (the image, which is generated and transmitted from a source, comprised in the AVI signal is cached in the memory and retrieved upon user selection—column 11, lines 50-62); processing the interactive signal at the viewer location to generate a

sensitive area on the image (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17); receiving a viewer input selecting the sensitive area (column 18, lines 22-32); and retrieving the cached data (column 11, lines 50-62) to generate a virtual channel video display (selection displays or supplemental screens) which includes rendering the secondary portion visible (see figure 18 and column 18, lines 14-32).

With regards to claim 15, Broadwin discloses a method for implementing an interactive television application at a viewer location, comprising: receiving a composite signal (combined AVI signal—column 5, lines 11-13) at the viewer location over a communications channel, the composite signal including: video signals representing an image comprising a primary portion (audiovisual content comprising still video images—column 4, lines 55-63) and a secondary portion (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for generating at least first and second sensitive areas (selection buttons or hyperlinks—column 7, lines 34-41 and 48-53), signals (AVI signals) representing data for at least first and second virtual channel displays (selection displays or supplemental screens in conjunction with the respective MPEG stills—to column 6, lines 22-33); processing the signals representing data and caching the data at the viewer location (column 11, lines 41-46); processing the video signals at the viewer location to generate the image (the image, which is generated and transmitted from a source, comprised in the AVI signal is cached in the memory and

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retrieved upon user selection—column 11, lines 50-62); executing the instructions at the viewer location to generate at least first and second sensitive area displays overlaid upon the image (column 17, lines 44-46); receiving a viewer input selecting the first sensitive location (column 18, lines 22-32); responding to selection of the first sensitive location by retrieving and processing cached data (column 11, lines 50-62) to generate a first virtual channel video display (selection displays or supplemental screens) which includes rendering visible the secondary portion of the image (see figure 18 and column 18, lines 14-32); receiving a viewer input selecting the second sensitive location (column 18, lines 27-32); responding to selection of the second sensitive location by retrieving and processing cached data to generate a second virtual channel video display which includes rendering visible the secondary portion of the image (column 18, lines 27-32).

Considering claim 18, Broadwin discloses a method for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: receiving a video signal constituting an image (audiovisual content comprising still video images—column 4, lines 55-63); defining a first specified portion of the image (“instant web” column in fig. 17) as a location for a first sensitive area (column 18, lines 5-13); generating first instructions for causing a broadcast receiver to render the first specified image portion as a first sensitive area (column 18, lines 5-13) to implement a first interactive television operation (column 7, lines 34-41 and 48-53); generating instructions (application code and data comprised in the

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interactive application content—column 5, lines 6-8) for a first virtual channel (see figure 17 wherein *Chrysler* is reserved for channel 203) to be displayed in said sensitive area (selection button or hyperlink—column 7, lines 34-41 and 48-53), said virtual channel comprising a plurality of secondary screens (one or more selection screens—column 6, lines 22-33 and also see MPEG still of figure 18), wherein the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36); defining a second specified portion of the image as a location for a second sensitive area (thumbprint images in figure 18—column 18, lines 14-32); and generating second instructions for selectively causing a broadcast receiver to render the second specified image portion as a second sensitive area (thumbprint images in figure 18—column 18, lines 14-32) to implement a second interactive television operation (thumbprint images in figure 18—column 18, lines 14-32); generating instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for a second virtual channel (selection displays or supplemental screens of figure 18—column 18, lines 22-32) to be displayed in said sensitive area (selection button or hyperlink—column 7, lines 34-41 and 48-53), said virtual channel comprising a plurality of secondary screens (one or more selection screens—column 6, lines 22-33), wherein the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36); the first interactive television operation rendering the second sensitive area visible on a display screen and enabling the second instructions (column 18, lines 27-32).

As for claim 19, Broadwin discloses a method for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: receiving a first video signal constituting a primary image (audiovisual content comprising still video images—column 4, lines 55-63); receiving a second video signal constituting a secondary image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12); combining the first and second video signals to form a broadcast video signal representing a composite of the primary and secondary images (column 5, lines 11-13); outputting the broadcast video signal for transmission to a customer location (column 5, lines 20-26) generating first instructions to form an interactive television client application program (column 5, lines 6-8) which renders a specified portion of the composite image as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17); receiving an operator input calling for expansion of display of the primary image so as to cover at least a part of the secondary image at a viewer location (column 11, lines 7-9 and 16-23); responding to the operator input by generating second instructions in the interactive television client application program to display the primary signal in a full-frame mode at the viewer location (see figures 15 and 16—column 9, lines 42-60); outputting the first and second instructions to the viewer location (column 5, lines 20-26).

With regards to claim 20, Broadwin discloses a method wherein the operator input includes a specific time for suppression of display of the secondary image at a viewer location (column 10, lines 12-15).

Regarding claim 25, Broadwin discloses a system for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: a video switcher (106 in figure 1) which receives a first video signal constituting a primary image (audiovisual content comprising still video images—column 4, lines 55-63) and a second video signal constituting a secondary image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), combines the first and second video signals to form a broadcast video signal representing a composite of the primary and secondary images (column 5, lines 11-13), and outputs the broadcast video signal for transmission to a customer location (column 5, lines 20-26); a content staging server (106) which receives a specification of a predetermined location in at least one of the primary and secondary image as a specified portion of the composite image (column 5, lines 13-17); and an interactive TV server (104 in figure 1) component coupled to the content staging server, which generates instructions to form an interactive television client application program (column 5, lines 1-8) to render the specified portion of the composite image as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17), said sensitive area (selection button or hyperlink—column 7, lines



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34-41 and 48-53) including a virtual channel (selection displays or supplemental screens in conjunction with the respective MPEG stills—column 6, lines 22-33) comprising a plurality of secondary screens (one or more selection screens—column 6, lines 22-33) and the data for said screens is to be loaded into said screens from storage (column 3, lines 18-36) and outputs the instructions for transmission to a viewer location (column 5, lines 20-26).

Considering claim 26, Broadwin discloses a set-top box for implementing an interactive television application at a viewer location, comprising: an input terminal for receiving a composite signal at the viewer location over a communications channel (column 6, lines 41-43), the composite signal including video signals representing an image comprising a primary portion (audiovisual content comprising still video images—column 4, lines 55-63) and a secondary portion (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), including instructions for generating a sensitive area (column 5, lines 1-8), and signals representing data for a virtual channel display (column 11, lines 50-62); a processor (314 in figure 3) coupled to the input terminal for processing the signals representing data and caching the data and for processing the interactive signal at the viewer location to generate a sensitive area on the image (column 7, lines 25-41); an audio-video output circuit (304 in figure 3) coupled to the input terminal to process the video signal and supply an audio-video output signal for output to a display device (column 6, lines 60-67); a remote control (152 in figure 2) receiver circuit responsive to viewer

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inputs (140 in figure 2) to highlight and select the sensitive area (column 7, lines 42-53); and the processor retrieving the cached data to generate a virtual channel video display which includes rendering the secondary portion visible (column 11, lines 50-62).

As for claim 27, Broadwin discloses a system for generating a datastream at a control location for implementing an interactive television application at a viewer location, comprising: a video switcher (106 in figure 1) which receives a first video signal constituting a primary image (audiovisual content comprising still video images—column 4, lines 55-63) and a second video signal constituting a secondary image (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), combines the first and second video signals to form a broadcast video signal representing a composite of the primary and secondary images (column 5, lines 11-13), and outputs the broadcast video signal for transmission to a customer location (column 5, lines 20-26); a content staging server (106) which receives a specification of a predetermined location in at least one of the primary and secondary image as a specified portion of the composite image (column 5, lines 13-17) and which generates a command upon receipt of an operator input calling for expansion of display of the primary image so as to cover at least a part of the secondary image at a viewer location (column 11, lines 7-9 and 16-23); an interactive TV server (104 in figure 1) component coupled to the content staging server, which generates instructions to form an interactive television client application program (column 5, lines 1-8) to render the

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specified portion of the composite image as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17) and, in response to the command, generates second instructions in the interactive television client application program to display the primary signal in a full-frame mode at the viewer location (using the “exit option,” the secondary signal comprising the MPEG stills will be closed, which leaves the primary signal to be seen in full screen—column 18, lines 37-39), the interactive TV server component outputting the first and second instructions, signal for transmission to the viewer location (column 5, lines 20-26).

Considering claim 28, Broadwin discloses that the outputting step includes broadcasting the instructions and the video signal from a direct broadcast satellite (108 in figure 1—column 5, lines 19-28).

As for claim 29, Broadwin discloses that the transmitting step includes transmitting the broadcast signal to set top boxes (140 in fig. 1—column 5, lines 38-46).

With regards to claim 30, Broadwin discloses that the set top boxes include an integrated receiver-decoder and a processor supporting an interactive television runtime environment (140 in fig. 1—column 5, lines 38-46).

Regarding claim 31, Broadwin discloses that the receiving step includes the step of using a set top box to receive the composite signal (column 5, lines 23-26 and 38-

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46), and the set top box executes an interactive television application to process the composite signal (column 5, lines 3-6 and 47-53).

Considering claim 32, Broadwin discloses that the set top box includes a tuner/demodulator (broadcast receiver—column 6, lines 40-43, inherently comprises a tuner/demodulator) to receive the composite signal.

As for claim 33, Broadwin discloses that the first channel video display includes an interactive advertising area (column 18, lines 43-50).

With regards to claim 39, Broadwin discloses that the transmitting step includes the step of transmitting the composite broadcast data stream to a set top box at the viewer location (140 in fig. 1—column 5, lines 38-46).

Regarding claim 40, Broadwin discloses that the step of defining the specified location as a location for a sensitive area (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17) includes the step of defining said location by implementing instructions (column 5, lines 1-8) contained in an interactive television client application program.

Considering claim 41, Broadwin discloses that the first instructions are contained in an interactive television client application program (column 5, lines 1-8).

***Claim Rejections – 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16, 21, 23, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin (US 5,903,816) in view of Haddad (US 2005/0097619).

Considering claim 16, Broadwin discloses a method for implementing an interactive television application at a viewer location, comprising: receiving a composite signal (combined AVI signal—column 5, lines 11-13) at the viewer location over a communications channel, the composite signal including: signals representing at least first (audiovisual content comprising interactive audiovisual content—column 4, lines 55-63) and second enhanced video display screens (interactive application content comprises MPEG still image data, which are displayed on a separate screen upon user selection—column 5, lines 3-6, column 6, lines 9-12 and column 18, lines 9-21), and signals including instructions (column 5, lines 6-8) for generating sensitive areas (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17) at specified locations on the first and second enhanced video display screens for receiving viewer purchase requests (column 17, lines 46-54); receiving viewer input (a user selecting a

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respective channel) specifying a first desired enhanced video display screen (first MPEG stills screen—column 18, lines 9-21); processing the video signals at the viewer location to generate a video display of the first desired enhanced video display screen (column 18, lines 9-21); processing the instructions at the viewer location to generate a first sensitive area display (hyperlinks or buttons) overlaid upon the video display at the specified screen location on the first desired enhanced video display screen (column 7, lines 34-41 and 48-53 and “instant web” column in fig. 17); receiving a viewer input selecting the first sensitive area to request a first purchase (column 7, lines 60-65); storing data specifying the first purchase request in a purchase buffer (transaction server—160 in figure 3—column 7, lines 60-65); receiving viewer input (the user selecting a selection option from the first MPEG stills screen) specifying a second desired enhanced video display screen (column 18, lines 16-32); processing the video signals at the viewer location to generate a video display of the second desired enhanced video display screen (column 18, lines 27-32); processing the instructions at the viewer location to generate a second sensitive area display overlaid upon the video display at the specified screen location on the second desired enhanced video display screen (see figure 18 and column 18, lines 14-32); receiving a viewer input selecting the second sensitive area to request a second purchase (column 17, lines 44-54); storing data specifying the second purchase request in the purchase buffer (transaction server 160 in figure 3 and column 18, lines 52-59).

Broadwin fails to disclose responding to a viewer request by displaying data representing the first and second purchase requests stored in the purchase buffer; displaying sensitive areas to receive one of a viewer request to cancel the first and second purchases and a viewer request to execute the first and second purchases; and generating purchase request signals if a viewer request to execute the purchases is received.

In analogous art, Haddad discloses displaying data representing the first and second purchase requests stored in the purchase buffer (paragraph 0080, lines 1-8); displaying sensitive areas to receive one of a viewer request to cancel the first and second purchases (paragraph 0173, lines 1-2) and a viewer request to execute the first and second purchases (paragraph 0032, lines 10-16 and paragraph 0126, lines 1-13); and generating purchase request signals if a viewer request to execute the purchases is received (paragraph 0073, lines 1-4 and paragraph 0127, lines 1-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin's system to include a sensitive area comprising a cancel and execute entries, as taught by Haddad, for the benefit of preventing unauthorized reception (paragraph 0032, lines 16-18).

As for claims 21 and 23, Broadwin discloses a method for implementing an interactive television application at a viewer location, comprising: receiving a composite

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signal (combined AVI signal—column 5, lines 11-13) at the viewer location over a communications channel, the composite signal including: video signals representing an image comprising a primary portion (audiovisual content comprising still video images—column 4, lines 55-63) and a secondary portion (interactive application content comprises still image data—column 5, lines 3-6 and column 6, lines 9-12), an interactive signal including instructions (application code and data comprised in the interactive application content—column 5, lines 6-8) for generating a plurality of sensitive areas (selection buttons or hyperlinks—column 7, lines 34-41 and 48-53), and signals (AVI signals) representing data for a virtual channel display (selection displays or supplemental screens in conjunction with the respective MPEG stills—to column 6, lines 22-33); processing the signals representing data and storing the data at the customer location (column 11, lines 41-46); processing the video signal at the viewer location to generate the image (the image, which is generated and transmitted from a source, comprised in the AVI signal is cached in the memory and retrieved upon user selection—column 11, lines 50-62); processing the interactive signal at the viewer location to generate a first sensitive area on the image (column 17, lines 44-46); receiving a viewer input selecting the first sensitive area (column 18, lines 22-32); retrieving the stored data to generate a virtual channel video display which includes rendering the secondary portion visible (column 18, lines 27-32); processing the interactive signal at the viewer location to generate a second sensitive area on the image (see figure 18 and column 18, lines 14-32). Broadwin further discloses an entry



form (figure 19) to be filled out by a customer for saving customer identification information in the transaction server (160) for possible user transactions.

Broadwin fails to explicitly disclose receiving viewer input of a customer I.D. number; receiving a viewer input in the second sensitive area to store a customer I.D. number; and processing the interactive signal at the viewer location to initiate a purchase transaction using the customer I.D. number.

In analogous art, Haddad discloses receiving viewer input of a customer I.D. number (paragraph 0080, lines 9-13 and paragraph 0071, lines 1-2); receiving a viewer input in the second sensitive area to store a customer I.D. number (paragraph 0060, lines 1-7); and processing the interactive signal at the viewer location to initiate a purchase transaction using the customer I.D. number (paragraph 0060, lines 4-7, paragraph 0071, lines 1-2, and paragraph 0080, lines 13-16).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin's system to include a customer I.D. number, as taught by Haddad, for the benefit of providing the flexibility to change the mix of customers to receive a particular transmission (paragraph 0080, lines 13-16).

Claim 36 is met Broadwin and Haddad. In particular, Haddad discloses the step of providing a customer identification number for the viewer location (paragraph 0080, lines 9-13 and paragraph 0071, lines 1-2).

Claim 37 is met Broadwin and Haddad. In particular, Haddad discloses the step of providing the customer identification number includes the step of providing a plurality of customer identification numbers for the viewer location (paragraph 0080, lines 9-13 and paragraph 0071, lines 1-2).

10. Claims 22, 24, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin (US 5,903,816) in view of Haddad (US 2005/0097619) and further in view of Tsuei (US 2004/0083184).

With regards to claims 22 and 24, Broadwin and Haddad disclose that the instructions generating the sensitive areas include category information (Broadwin—column 6, lines 40-57 and column 19, lines 15-20).

Broadwin and Haddad fail to disclose that the customer I.D. number includes a permission level, and the stage of processing the interactive signal at the viewer location to generate a second sensitive area on the image to receive viewer input of a customer I.D. number includes selectively executing a purchase transaction based on a comparison of the category information and the permission level.

In analogous art, Tsuei disclose that the customer I.D. number (Key Card which is authenticated by associating it with customer identification information—paragraph

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0014, lines 1-9) includes a permission level (Type 1, Type 2, and Type 3—paragraph 0188, lines 1-7), and the stage of processing the interactive signal at the viewer location to generate a second sensitive area on the image to receive viewer input of a customer I.D. number includes selectively executing a purchase transaction based on a comparison of the category information and the permission level (paragraph 0188, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Broadwin and Haddad to include a purchase transaction based on a comparison of the category information and the permission level, as taught by Tsuei, for the benefit of putting restrictions on what is accessible to a child for a purchase transaction (paragraph 0188, lines 1-23).

With regards to claim 38, Broadwin and Haddad disclose an interactive television system. Broadwin and Haddad fail to disclose that the identification numbers include a variety of permission levels.

In analogous art, Tsuei discloses that the identification numbers include a variety of permission levels (Type 1, Type 2, and Type 3—paragraph 0188, lines 1-7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of Broadwin and Haddad to include

a variety of permission levels included in the identification numbers, as taught by Tsuei, for the benefit of putting restrictions on what is accessible to a child for a purchase transaction (paragraph 0188, lines 1-23).

11. Claims 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin (US 5,903,816) in view of Bankers (US 2004/0250282).

With regards to claim 34, Broadwin discloses an interactive television system. Broadwin fails to disclose that the first channel video display shows instructions for the viewer.

In analogous art, Bankers discloses that the first channel video display shows instructions for the viewer (paragraph 0041, lines 12-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin's system to include instructions for the viewer, as taught by Bankers, for the benefit of instructing the user to select a menu (paragraph 0041, lines 12-13).

Regarding claim 35, Broadwin and Bankers disclose an interactive television system. In particular, Bankers discloses that the first channel video display includes an interactive area containing an initial welcome screen including instructions for operating interactive features (Bankers—paragraph 0041, lines 12-13).

12. Claims 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Broadwin (US 5,903,816) in view of Schaefer (US 2002/0124252).

With regards to claim 42, Broadwin discloses an interactive television system. Broadwin fails to disclose inserting triggers into the broadcast signal to initiate desired changes.

In analogous art, Schaefer discloses inserting triggers into the broadcast signal to initiate desired changes (paragraph 0028, lines 17-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Broadwin's system to include inserting triggers, as taught by Schaefer, for the benefit of initiating the display of a visual indication to a user (paragraph 0028, lines 22-25).

Claim 43 is met Broadwin and Schaefer. In particular, Schaefer discloses that the desired changes include updates in the content being sent to the viewing audiences (paragraph 0028, lines 17-25).

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harun M. Yimam whose telephone number is 571-272-7260. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HMY



ANDREW Y. KOENIG  
PRIMARY PATENT EXAMINER